John P. McCarthy, Michael Johnson, and Nancy Anthony

The Lorton Town Center Archeology Project Partnership

Cultural resources management activities, like most aspects of contemporary society, seek to provide maximum benefit at minimum cost. The conservation planning and research interests of public authorities seeking to maximize site preservation and/or data recovery are very often at odds with the cost minimization imperative of development interests, be they in the private or public sectors. Accordingly, archeologists and other cultural resource management professionals often feel caught in the middle between these conflicting considerations. In a project nearing completion, the Fairfax County Park Authority (FCPA) and Greenhorne & O'Mara, Inc. (G&O) are working with volunteers from the community to complete archeological evaluation and data recovery investigations at three significant prehistoric sites located along Pohick Creek in Northern Virginia prior to construction of a private development project.

This program represents an unusual partnership designed to not only achieve local research and compliance archeology objectives, but to also provide public outreach and involvement in local archeology. The critical factor in this project has been the FCPA's commitment of staff and volunteer resources to leverage the effectiveness of the private developer's financial commitment, resulting in a true cooperative venture.

Fairfax County Park Authority staff and volunteers, G&O staff, and Fairfax County Field School's teachers, excavating at, a fire-cracked rock scatter.

The project arose when the developer sought changes in the zoning to allow residential construction on a 206-acre parcel in southern Fairfax County. The property is adjacent to a commuter rail station and also has excellent access to one of the region's major commuter highways, Interstate 95. Local governments in the Washington, DC, metropolitan area routinely place a variety of requirements on developers seeking zoning changes and construction permits. In this case, because Fairfax County's Heritage Resource Management Plan established preservation of significant heritage resources as a matter of county policy, the county required that the developer evaluate the significance of 12 previously identified archeological resources at the proposed site of the Lorton Town Center development. The developer was also required to recover significant archeological data prior to construction.

Initial investigations, undertaken by G&O for the developer, indicated that three of the 12 sites warranted data recovery excavation to preserve representative site data and artifacts. Site 2076, a Late Archaic to Early Woodland occupation, is situated on a narrow terrace overlooking the adjacent creek that had never been plowed. Dense concentrations of fire-cracked rock having no charcoal suggest the possibility of sweatlodges at this location. Site 2079, located on a flat terrace also overlooking the creek that also had never been plowed, is a very functionally and temporally diverse occupation including workshop and domestic occupations dating from Paleo-Indian through Woodland periods. Finally, Site 2082 was a large lithic scatter, also located on a high terrace adjacent to the creek with a spring draining into the creek from one corner of the site. Although a large portion of this site had been subjected to plowing, portions of the site closest to the creek evidenced undisturbed buried deposits. This site appeared to have been occupied repeatedly from Early Archaic through Woodland period. As a group, these sites represent a microcosm of Northern Virginia prehis-

tory. Recovery of representative data would contribute to a greater understanding of the prehistoric residents of the area in accordance with the goals of the county's Heritage Resource Management Plan.

The FCPA and G&O, on behalf of its client, entered into a partnership to undertake further evaluation and data recovery excavation over two field seasons. FCPA and G&O share the leadership of the project; however, FCPA established the goals and objectives of the data recovery investigations and has lead the field efforts. The G&O team has supplied, at client expense, experienced field and laboratory supervisors and technical support for data analysis, while the county has supplied the services of its staff archeologist, geographic information systems support for data recording and analysis, and, most importantly, the services of a cadre of archeological volunteers, most of whom have many years of experience.

The county's program provides archeological opportunities in both the field and laboratory for people of all ages, from students to retirees. The county's volunteers receive hands-on training in the field and laboratory. Working closely with county staff, and during this project the volunteers also worked closely with experienced archeological supervisors from G&O's staff. The skills involved include shovel and trowel excavation, dry and wet screening of soil, artifact recognition in the field, making and recording field observations, drawing plans and soil profiles, and artifact processing and identification in the laboratory.

Excavations have sought to balance the quality and quantity of data collected. Fieldwork included close-interval shovel testing of the two unplowed sites and with the addition of intensive controlled surface collection of the plowed portion of the third site. Extensive manual excavation followed at Sites 2076 and 2079, while at site 2082 select locations were mechanically stripped of plowzone soil and examined for truncated subsurface features. The best-preserved portions of this site will be preserved in dedicated open-space. The jointly developed research design allowed for a flexible field strategy responsive to site data as it was recovered and artifacts processed and analyzed concurrently with field investigations. For example, the project team returned to Site 2076 to conduct additional field investigations this summer when analysis of data recovered last spring revealed a concentration of early cultural material in a corner of the site that warranted further investigation. Artifact processing, data analysis, and project report activities will continue at the FCPA laboratory facility through next spring.

In addition to hands-on volunteer participation in the field and the laboratory, the project has included several other outreach activities. While not a formally organized part of the project, a number of elementary, middle school, high school, and college groups of students have visited the sites to see archeologists at work and to learn about Native American cultures of the region. These activities seemed to grow naturally out of the county's volunteer program and its close ties to local educators. Many of the students also had an opportunity to participate in the fieldwork. One of these visits was featured as part of the introduction to the PBS video series "Ancient Civilizations for Children." Educators taking part in Fairfax County and Virginia Historical Society Teacher's Field Schools have participated in fieldwork at the sites, further increasing connections between educators and the county program. In addition, the developer is considering an interpretive display for its sales center and options for ongoing public interpretation are being discussed.

While the volunteers had the opportunity to gain, or refine, field and/or laboratory skills, they and site visitors alike had the opportunity to personally engage with the professional archeologists staffing the project, learning about careers in the field. Additionally, since the program involves volunteers of all ages, there has been opportunity for unusual intergenerational communication and sharing that has helped create a real sense of community among those involved in the project.

Hands-on participation de-mystified the processes of archeology, and hot, humid summer field conditions removed much of the romantic allure of the discipline. Yet, volunteers and visitors both had the opportunity to engage with the archeological record of the sites, and by extension, with the prehistoric residents of the region. They had the opportunity to see and touch materials last held by human hands thousands of years ago, and through this process feel a closer connection to the past.

Most important for cultural resources management, however, is the model that this project represents for achieving a balance between conflicting cost and research/preservation interests

that most cultural resource management professionals face on a daily basis. To date, the G&O team has worked over 2,500 hours on the project, including both the initial evaluation effort and subsequent project with the FCPA. FCPA staff and volunteers have contributed over 4,000 hours to the project. It is anticipated that G&O staff will participate in approximately another 1,000 hours of project effort matched by at least a similar number of FCPA staff and volunteer hours as fieldwork is completed and emphasis turns to artifact processing and data analysis. Clearly, FCPA's commitment of staff and volunteer labor has indeed leveraged the financial commitment of Lorton Town Center's private developer. The county's willingness to make a substantial contribution to a project in this way gives it considerable credibility when negotiating heritage preservation issues with developers.

It must be noted that this project was able to succeed because the developer addressed the cultural resources issues of the project well in advance of construction. Volunteer labor is not well-suited to aggressive schedule requirements. In this case, there was time to be flexible and responsive to site data as it was developed and to work with a volunteer pool of labor whose size differed each day, although a core group could be relied on. In addition, volunteer labor is not completely free. Volunteers require, and deserve, instruction and careful supervision beyond that needed by a professional excavation team. Nonetheless, all parties involved in the Lorton Town Center project count it an archeological success.

John P. McCarthy, RPA, is senior project manager–cultural resources with Greenhorne & O'Mara, Inc.

Michael Johnson is an archeologist with the Fairfax County Park Authority.

Nancy Anthony is archeology crew chief with Greenhorne & O'Mara, Inc.

Nathan Caldwell and Nancy Thomas

Volunteers Re-light Kilauea Point Lighthouse

Thanks to three dedicated, persistent volunteers who overcame several major obstacles, the historic Kilauea Point Lighthouse sent out it's signature double flash for the first time in over seven years—and only the second since February 1976—for the Volunteer Recognition Dinner at Kilauea Point National Wildlife Refuge on November 21, 1997.

Kilauea Point's four ton, eight foot high, second-order clamshell Fresnel lens, now the world's largest, began sending out its signature flash May 1, 1913. It went dark in February 1976 replaced by an automated beacon. The lens was lit for the lighthouse's 75th anniversary in 1988. Its clockworks were engaged and the lens lit in 1989 for the 200th anniversary of the U.S. Lighthouse Service.

Originally, the lens sat in a tray base supported on mercury and compressed air. A clockwork mechanism of weights and pulleys, rewound every three-and-one-half hours, turned the lens. Eventually, the light was electrified and its clock work mechanism replaced by an electric motor.

The lighthouse was placed on the National Register of Historic Places in 1979. In 1985 the lighthouse station on Kaua'i, at the northernmost point in the main Hawaiian Islands, was transferred to the U.S. Fish and Wildlife Service becoming Kilauea Point National Wildlife Refuge. Over 300,000 visitors annually view the lighthouse, seven species of seabirds and the endangered nene, or Hawaiian goose. It has also attracted hundreds of volunteers.

In 1986, then Refuge Manager Dan Moriarty convinced two volunteers, Herman Stiglemeier and Hal Frazier, to re-light the lens for the lighthouse's 75th anniversary. With the additional help of a Los Angeles firm called G Force, a laser light shown through the historic lens on its anniversary.